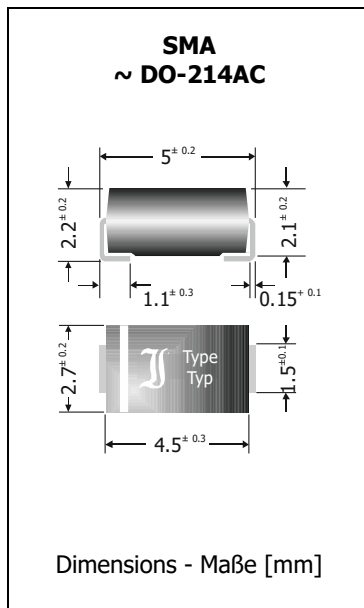


SK12 ... SK115
SMD Schottky Barrier Rectifier Diodes
SMD Schottky-Gleichrichterdiodes
 $I_{FAV} = 1 \text{ A}$ $V_{RRM} = 20...150 \text{ V}$
 $V_{F1} < 0.50 \text{ V}$ $I_{FSM} = 30/33 \text{ A}$
 $T_{jmax} = 150^\circ\text{C}$

Version 2018-10-11

**Typical Applications**

Output Rectification in DC/DC Converters, Polarity Protection, Free-wheeling diodes
 Commercial grade
 Suffix -Q: AEC-Q101 compliant ¹⁾
 Suffix -AQ: in AEC-Q101 qualification ¹⁾

Features

Low forward voltage drop
 Compliant to RoHS, REACH, Conflict Minerals ¹⁾

Mechanical Data ¹⁾

Taped and reeled 7500 / 13"
 Weight approx. 0.07 g
 Case material UL 94V-0
 Solder & assembly conditions 260°C/10s
 MSL = 1

**Typische Anwendungen**

Ausgangsgleichrichtung in Gleichstromwandlern, Verpolschutz, Freilaufdiodes
 Standardausführung
 Suffix -Q: AEC-Q101 konform ¹⁾
 Suffix -AQ: in AEC-Q101 Qualifikation ¹⁾

Besonderheiten

Niedrige Fluss-Spannung
 Konform zu RoHS, REACH, Konfliktmineralien ¹⁾

Mechanische Daten ¹⁾

Gegurtet auf Rolle
 Gewicht ca.
 Gehäusematerial
 Löt- und Einbaubedingungen

Maximum ratings ²⁾**Grenzwerte ²⁾**

| Type Typ | DC blocking voltage Sperrgleichspannung | Repetitive peak reverse voltage Periodische Spitzensperrspannung | Surge peak reverse voltage Stoßspitzensperrspannung |
|-------------|--|---|--|
| | V_{DC} [V] ³⁾ | V_{RRM} [V] | V_{RSM} [V] |
| SK12 | | 20 | 20 |
| SK13 | | 30 | 30 |
| SK14/-Q/-AQ | 32 | 40 | 40 |
| SK15 | | 50 | 50 |
| SK16/-Q | | 60 | 60 |
| SK18 | | 80 | 80 |
| SK110/-AQ | 80 | 100 | 100 |
| SK115 | | 150 | 150 |

| | | | | |
|--|-----------------------------------|---------------------------------|--------------|----------------------|
| Average forward current Dauergrenzstrom | $T_T = 100^\circ\text{C}$ | I_{FAV} | 1 A | |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15 \text{ Hz}$ | $T_T = 100^\circ\text{C}$ | I_{FAV} | 6 A |
| Peak forward surge current Stoßstrom in Fluss-Richtung | Half sine-wave Sinus-Halbwelle | 50 Hz (10 ms) 60 Hz (8.3 ms) | I_{FSM} | 30 A 33 A |
| Rating for fusing – Grenzlastintegral | | $t < 10 \text{ ms}$ | i^2t | 4.5 A ² s |
| Operating junction temperature – Sperrschichttemperatur | | T_j | -50...+150°C | |
| Storage temperature – Lagerungstemperatur | | T_s | -50...+150°C | |

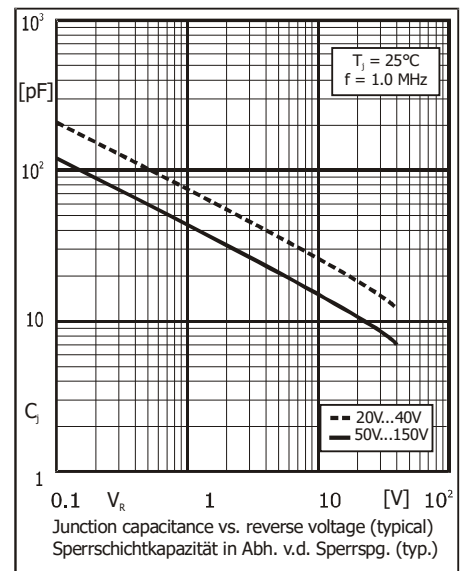
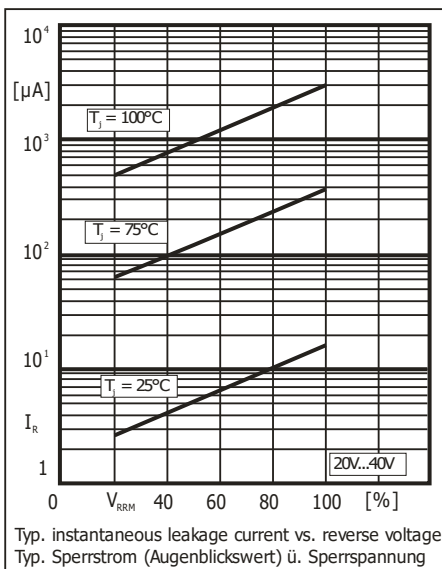
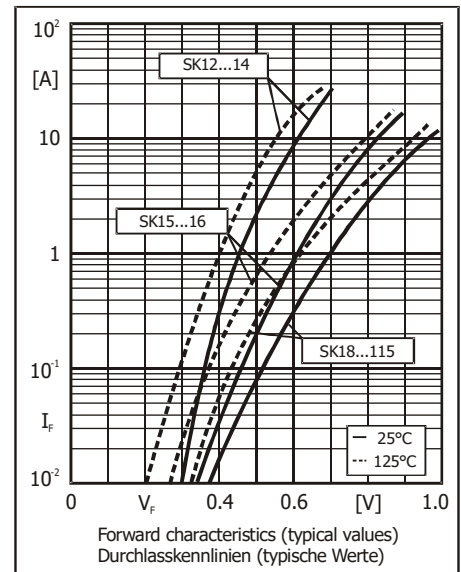
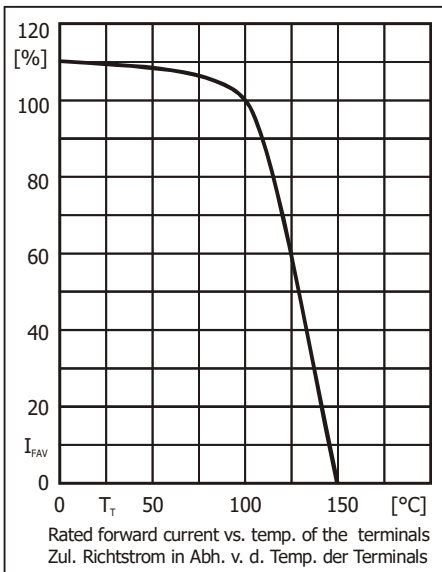
- Please note the [detailed information on our website](#) or at the beginning of the data book
Bitte beachten Sie die [detaillierten Hinweise auf unserer Internetseite](#) bzw. am Anfang des Datenbuches
- $T_A = 25^\circ\text{C}$ unless otherwise specified – $T_A = 25^\circ\text{C}$ wenn nicht anders angegeben
- Defined for -AQ parts only, $T_j = 125^\circ\text{C}$ – Nur definiert für -AQ Bauteile, $T_j = 125^\circ\text{C}$

Characteristics
Kennwerte

| Type Typ | Forward voltage Durchlass-Spannung | | | Leakage current Sperrstrom | | | Leakage current Sperrstrom | | |
|----------------------|---------------------------------------|-------------|---------|-------------------------------|-------------|---------|-------------------------------|-------------|---------|
| | V_F [V] | @ I_F [A] | @ T_j | I_R [μ A] | @ V_{RRM} | @ T_j | I_R [mA] | @ V_{RRM} | @ T_j |
| SK12 ... SK14/-Q/-AQ | < 0.50 | 1 | 25°C | < 500 | | 25°C | < 5.0 | | 100°C |
| SK15, SK16/-Q | < 0.70 | 1 | 25°C | < 500 | | 25°C | < 5.0 | | 100°C |
| SK18 ... SK115 | < 0.85 | 1 | 25°C | < 200 | | 25°C | 2.0 | | 100°C |

Thermal resistance junction to ambient – Wärmewiderstand Sperrschicht – Umgebung
 Thermal resistance junction to terminal – Wärmewiderstand Sperrschicht – Anschluss

| | |
|-----------|------------------------|
| R_{thA} | < 70 K/W ¹⁾ |
| R_{thT} | < 30 K/W |



Disclaimer: See data book page 2 or [website](#)
Haftungsausschluss: Siehe Datenbuch Seite 2 oder [Internet](#)

1 Mounted on P.C. board with 25 mm² copper pads per terminal – Montage auf Leiterplatte mit 25 mm² Kupferbelag je Anschluss